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(6/28/02)IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Thomas, et al.

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Group Art Unit: 3613

Examiner: Siconolfi, Robert

Title: DISC BRAKE SEAL ASSEMBLY

RESPONSE

Box AF
Assistant Commissioner of Patents
Washington, D.C. 20231

Sir:

This paper is responsive to the Final Office Action mailed on May 3, 2002. Claims 19-33 remain in this application. Please amend the application as follows.

REQUEST FOR RECONSIDERATION

The Examiner rejected claims 19-33 under 35 U.S.C. §103(a) as being obvious over Baumgartner in view of Angerfors. Baumgartner discloses a disc brake including a traverse member 7 having two adjusting spindles 70 and 71 each screwed into a bore. As disclosed in column 7, lines 5 to 9, and shown in Figure 1B, a friction ring 80 is fastened to the lower edge of the threaded bore of the traverse member 7 into which the spindle 70 is screwed. The inner diameter of the friction ring 80 is slightly smaller than the outer diameter of the adjusting spindle 70. Therefore, the friction ring 80 provides a frictional torque on the adjusting spindle 70,

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preventing rotation of the spindle 70 when stressed by shaking. As shown in Figure 1B, the exterior of the spindle 70 is threaded, and the inner diameter of the friction ring 80 engages in the threads of the outer diameter of the spindle 70. Angerfors discloses a tappet assembly 14 of a disc brake including a sleeve with an internal thread 23 that engages an external thread 24 of a second part. An elastic sealing ring 41 creates a seal between the tappet assembly 14 and an unthreaded surface of an extension 25.

The Examiner contends that it would have been obvious to have the friction ring 80 of Baumgartner engage an unthreaded portion of the spindle 70. As disclosed in column 7, lines 9 to 14, the inner diameter of the friction ring 80 is smaller than the outer diameter of the adjusting spindle 70, and therefore the friction ring 80 can exercise a frictional torque on the spindle 70 to prevent rotation of the adjusting spindle 70. As shown in Figure 1B, the external threads of the spindle 70 engage the inner diameter of the friction ring 80. As the function of the friction ring 80 is to prevent rotation of the spindle 70, the engagement of the threads of the spindle 70 with the friction ring 80 would assist in preventing rotation. If the friction ring 80 of Baumgartner was employed on a smooth surface as suggested by Angerfors, the ability of the friction ring 80 to prevent rotation of the spindle 70 would be ruined. Thus, there is no proper suggestion to combine these references. Applicant's claims are not obvious in view of Baumgartner and Angerfors.

Claims 20, 21, 27 and 28 require that the outer surface of the support element provides a smooth sealing surface engaged by a lip portion of a further seal. As shown in Figure 1B of Baumgartner, nothing engages the outer surface of the angular part 81, which the Examiner is calling the support element. Neither of the references disclose or suggest a seal engaging an outer part of a support element, and Claims 20, 21, 27 and 28 are not obvious.

Claims 22 and 29 require that the support element is carried externally by the sleeve. Claims 23-25 and 30-32 claim that an annular base of the support element rests against an adjacent end of the sleeve. In Baumgartner, as shown in Figure 1B, the angular part 81 is not carried externally by the transverse member 7, nor does it rest against an adjacent end of the

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transverse member 7, but rather is carried externally of the friction ring 80. Angerfors also does not suggest any support element. Claims 22-25 and 29-32 are not obvious in view of Baumgartner and Angerfors.

Thus, claims 19-33 are in condition for allowance. No additional fees are seen to be required. If any additional fees are due, however, the Commissioner is authorized to charge Deposit Account No. 50-1482, in the name of Carlson, Gaskey & Olds, P.C., for any additional fees or credit the account for any overpayment. Therefore, favorable reconsideration and allowance of this application is respectfully requested.

Respectfully Submitted,

CARLSON, GASKEY & OLDS, P.C.

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CERTIFICATE OF FACSIMILE

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, TC 3600, After Final, 703-872-9327 on June 27, 2002.

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